

AMENDMENTS TO THE CLAIMS

1. (Currently amended) A method of ~~using~~ controlling the wait time (t_w) between the start of transmission of successive packets of known packet size (P) of a content to be transmitted to achieve a target bandwidth (B_T) during the transmission comprising the steps of:

selecting a target bandwidth (B_T) sought to be achieved during the transmission;

computing a wait time (t_w) between the start of successive packets of the transmission using the algorithm

$$t_w = \frac{P}{B_T} \quad ; \text{ and}$$

controlling the transmission of the packets ~~using~~ so that there is a residual time (t) between the end of transmission of one packet and the start of transmission of the next packet to establish the wait time (t_w).

2. (Currently amended) The method as claimed in claim 1 wherein the ~~computed wait~~ residual time t_w ~~t~~ that is used is rounded to a time unit.

3. (Original) The method as claimed in claim 2 wherein the rounding to the time unit is accomplished by a counter.

4. (Currently amended) The method as claimed in claim 1 ~~further comprising the step of~~ 5 wherein the time t_{used} is determined by:

determining the start time t_1 of transmission of a packet;

determining the end time t_2 of transmission of the packet, and

determining the time used t_{used} in transmitting the packet as $t_2 - t_1$.

5. (Currently amended) The method as claimed in claim 4 1 wherein the step of controlling further comprising ~~comprises~~ the steps of:

- (a) determining ~~the~~ a time used (t_{used}) in the transmission of a packet;
and
- (b) ~~determining a residual time (t) as $t_{\text{used}} - t_w$;~~
- (~~e~~) waiting the residual time t between the end of transmission of one packet to the start of transmission of the next packet.

6. (Currently amended) The method as claimed in claim 5 further comprising the step of repeating steps (a), and (b) ~~and (e)~~ for each packet transmitted.

7. (Currently amended) A method as in claim 5 1 wherein the controlling of the transmission of the packets with a residual time t is controlled by between successive packets is comprised of:

determining a value of start time t_{start} , of sending a packet and a current time t_{now} ;

performing a loop operation of:

- (a) computing a time $t_{\text{elapsed}} = t_{\text{now}} - t_{\text{start}}$,
- (b) comparing t_{elapsed} to the residual time t and transmitting the next packet when the value of $t_{\text{elapsed}} \geq t$.

8. (Original) The method as claimed in claim 7 further comprising the steps of computing an error value $\delta = t_{\text{elapsed}} - t$ and subtracting the value δ from a later supplied value of t .

9. and 10. Cancelled.

11. (Original) The method of claim 1, including the additional step of selecting the known packet size (P) of the packets to be transmitted.

12. (Original) The method of claim 1 wherein the known packet size (P) is provided by an application.

13. (Currently amended) Apparatus for ~~using the wait time (t_w) between~~ controlling the transmission of successive packets of known packet size (P) of a content to be transmitted to achieve a target bandwidth B_T during the transmission comprising:

a computer including

a program to control transmission of a content in packets of data;

means to input and receive parameters of the size (P) of the packets to be transmitted and of the desired target bandwidth (B_T); and

~~processing means to calculate a wait time (t_w) between successive packets of the transmission using the algorithm~~

~~$t_w = \frac{P}{B_T}$ and~~

control means to successively transmit the packets ~~with the~~ to have a residual time (t) between the end of transmission of one packet and the start of transmission of the next successive packet to achieve a wait time t_w between the packets

such that $t_w = \frac{P}{B_T}$.

14. (Currently amended) Apparatus as in claim ~~13~~ 15 wherein said ~~computer further~~ first means comprises:

means for determining the start time (t_1) of transmission of a packet;

means for determining the end time (t_2) of transmission of the packet, and

means for determining the time used (t_{used}) in transmitting the packet as $t_2 -$

t_1 .

15. (Currently amended) Apparatus as in claim ~~14~~ 13 wherein said ~~computer further~~ comprises:

first means for determining the time used (t_{used}) in the transmission of a packet;

~~second means for determining a residual time t as $t_w - t_{\text{used}}$; and~~

wherein said control means operates based on the determined t_{used} to wait the residual time t between the ~~start~~ end of transmission of one packet to the start of transmission of the next packet.

16. (Currently amended) Apparatus as in claim 15 wherein said ~~first and second determining means~~ operates ~~to determine the residual time t for each packet transmitted and~~ said control means operates to wait the residual time t between the start of transmission of one packet to the start of transmission of the next packet based on computing $t_w - t_{\text{used}}$.

17. (Currently amended) Apparatus as in claim ~~16~~ 13 further comprising means for controlling the residual time t by

determining a value of start time t_{start} , and a current time t_{now}

performing a loop operation of:

(a) computing a time $t_{\text{elapsed}} = t_{\text{now}} - t_{\text{start}}$, and

(b) comparing t_{elapsed} to the residual time t and transmitting the next packet when the value of $t_{\text{elapsed}} \geq t$.

18. (Original) Apparatus as in claim 17 further comprising means for computing an error value $\delta = t_{\text{elapsed}} - t$ and subtracting the value δ from a later supplied value of t .

19. (Currently amended) Apparatus as in claim 13 wherein said control means further comprises a counter that operates on a periodic basis to measure the wait residual time t_w t .

20. (Currently amended) Apparatus as in claim 13 wherein said computer operates said control means to compute the wait residual time t_w t based on other measured times.